



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,061	07/23/2001	Yihsiu Chen	2001-0056	3217
7590	01/10/2008		EXAMINER	
Samuel H. Dworetsky AT&T CORP. P.O. Box 4110 Middletown, NJ 07748-4110			TRAN, NGHI V	
			ART UNIT	PAPER NUMBER
			2151	
			MAIL DATE	DELIVERY MODE
			01/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**MAILED**

**JAN 10 2008**

**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/911,061

Filing Date: July 23, 2001

Appellant(s): Chen et al.

---

William Ryan  
For Appellant

## **EXAMINER'S ANSWER**

This is in response to the appeal brief filed December 10, 2007 appealing from the Office action mailed October 11, 2006.

### **(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

### **(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### **(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

### **(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

### **(5) Summary of Claimed Subject Matter**

The summary of invention contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

- Liu, (6,079,020) issued on June 20, 2000.
- Larson et al., (2004/0107286) issued on June 03, 2004.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu, U.S. Patent No. 6,079,020 (hereinafter Liu), in view of Larson et al., U.S. Patent Application Publication No. 2004/0107286 (hereinafter Larson).
  
2. With respect to claim 22, Liu teaches a method practiced at a network interface unit (NIU) directly connected to at least one local area network (LAN), said NIU also being connected to a non-secure node of a second network, which

second network is in packet communication with at least one access node of a secure virtual private network (VPN) [figs.1-2 and see abstract], the method comprising:

- receiving data packets from at least one device on said at least one LAN [210],
- multiplexing said data packets into at least one packet data stream [col.7, Ins.8-67],
- modifying said packet data streams in a security server in said NIU in accordance with a secure communication protocol by encrypting packets in said data streams and encapsulating resulting encrypted packets [240].

However, Liu does not explicitly show providing network destination address information from a Domain Name System (DNS) server for at least selected ones of said data streams.

In a method for establishing secure communication, Larson discloses providing network destination address information from a DNS server for at least selected ones of said data streams [paragraphs 0024, 0225, 0260-0268].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Liu in view of Larson by providing network destination address information from a DNS server for at least selected ones of said data streams because this feature is enabled at a first computer without a user entering any cryptographic information for establishing the secure communication mode of communication [Larson, see abstract]. It is for this

reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to automatically create of a VPN in response to a DNS server look-up function [Larson, paragraph 0261].

3. With respect to claim 23, Liu is silent on said modifying said packet data streams in a security server comprises modifying said packet streams in an IPsec server.

In a virtual private network, Larson discloses said modifying said packet data streams in a security server comprises modifying said packet streams in an IPsec server [paragraph 0285].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Liu in view of Larson by modifying said packet streams in an IPsec server because this feature is enabled at a first computer without a user entering any cryptographic information for establishing the secure communication mode of communication [Larson, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to automatically create of a VPN in response to a DNS server look-up function [Larson, paragraph 0261].

4. With respect to claim 24, Liu further teaches a method comprising:

- receiving at least one stream of data packets from said non-secure network [300 and 310],

- filtering out packets in said streams of received packets that are not from said VPN network, said filtering being performed by a firewall in said security server [320],
- modifying said packets in said at least one stream by decrypting said packets in said at least one received data stream and decapsulating resulting decrypted packets, said decrypting and decapsulating being performed by said security server [340],
- demultiplexing said at least one stream of received data packets to form at least one demultiplexed stream of data packets for delivery to said at least one LAN [350].

5. With respect to claim 25, Liu further teaches authenticating client devices on said at least one LAN, and wherein packets from authenticated client devices on said at least one LAN that are received at said network interface device are processed as packets received from said VPN [col.3, lns.1-61].

6. With respect to claim 26, Liu further teaches wherein said non-secure node of a second network is part of said NIU [131].

7. With respect to claim 27, Liu further teaches wherein said at least selected ones of said at least one packet data stream are applied to said non-secure node of said second network [fig.1].

#### (10) Response to Argument

In the remarks, applicant argued in substance that

- I. **The Examiner has failed to make the necessary factual inquires and correct and complete factual finding necessary to provide the underpinnings required to establish obviousness of claims 22-27 in accordance with KSR.**

In response to Appellant's argument that the Examiner has failed to make the necessary factual inquires and correct and complete factual finding necessary to provide the underpinnings required to establish obviousness of claims 22-27 in accordance with KSR, the examiner respectfully disagree. The examiner recognizes that obviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Liu in view of Larson by providing network destination address information from a DNS server for at least selected ones of said data streams because this feature is

enabled at a first computer without a user entering any cryptographic information for establishing the secure communication mode of communication [Larson, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to automatically create of a VPN in response to a DNS server look-up function [Larson , paragraph 0261].

**II. Weight accorded claim preamble.**

In response to applicant's arguments, the recitation "at a network interface unit (NIU)" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

**III. Examiner did accord weight to preamble and got it wrong.**

In response to applicant's arguments that examiner did accord weight to preamble and got it wrong, the examiner respectfully disagrees. First, the recitation "at a network interface unit (NIU)" has not been given

patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Second, Liu discloses at a network interface unit (NIU) [= network interface card 408] directly connected to at least one local area network (LAN) [= LAN 110 and/or 120], said NIU also being connected to a non-secure node of a second network [= public network 100], which second network is in packet communication with at least one access node of a secure virtual private network (VPN) [= VPN gateway 125] [fig.1]. Therefore, the examiner did accord weight to preamble and Liu discloses claimed feature as show in the above

**IV. Liu is directed to a different purpose not employing Applicant's steps.**

In response to Appellant's argument that Liu does not teach or suggest a "NIU directly connected to at least one ... LAN" thereby permitting portability and use at many different LAN location, the examiner respectfully disagree. Liu discloses at a network interface unit (NIU) [=

network interface card 408] directly connected to at least one local area network (LAN) [= LAN 110 and/or 120], said NIU also being connected to a non-secure node of a second network [= public network 100], which second network is in packet communication with at least one access node of a secure virtual private network (VPN) [= VPN gateway 125] [fig. 1]. Further, Applicant's argument does not commensurate with the scope of the claim. The claim 22 only recite the limitation of a method practiced at a network interface unit (NIU) directly connected to at least one local area network (LAN), said NIU also being connected to a non-secure node of a second network, which second network is in packet communication with at least one access node of a secure virtual private network (VPN).

However, claim 27 does not recite the limitation of permitting portability and use at many different LAN location (emphasis added). Therefore, Liu discloses claimed feature as show in the above.

**V. One skilled in the relevant art would have no reason for “providing network destination address information from a Domain Name System (DNS) server ...” in Liu, and no reason to incorporate Larson’s teaching in Liu.**

In response to Appellant's argument that no reason to incorporate Larson's teaching in Liu, the examiner respectfully disagree. The examiner recognizes that obviousness can only be established by

combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Liu in view of Larson by providing network destination address information from a DNS server for at least selected ones of said data streams because this feature is enabled at a first computer without a user entering any cryptographic information for establishing the secure communication mode of communication [Larson, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to automatically create of a VPN in response to a DNS server look-up function [Larson , paragraph 0261].

**(11) Evidence Appendix**

None

**(12) Related Proceedings Appendix**

None

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Nghi V. Tran

January 05, 2008

JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Conferee:

JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

NATHAN LYNN  
SUPERVISORY PATENT EXAMINER